## CLAIMS

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- A placental-blood extraction device comprising at least one extraction needle (10, 11) for piercing the vein of the umbilical cord and/or of the placenta, and a collection vessel (20) connected to said at least one needle (10, 11) via at least one tube (40), the device being characterized in that it further comprises suction means (30) connected to said at least one needle (10, 11) and adapted to suck the placental blood so as to feed said collection vessel (20), said suction means (30) comprising a vacuum bottle (20), in particular of the Redon type, that simultaneously forms a collection vessel.
- 15 2. A device according to claim 1, in which said suction means (30) further comprise a vacuum pump.
  - 3. A device according to either preceding claim, in which the device includes at least one injection and/or extraction site (51, 52, 53) between said at least one extraction needle (10, 11) and said collection vessel (20).
- 4. A device according to claim 3, in which at least one injection and/or extraction site (51, 52, 53) is provided on the tube (40).
- 5. A device according to claim 3 or claim 4, in which at least one injection and/or extraction site (51, 52, 53)30 is provided on the collection vessel (20).
  - 6. A device according to any one of claims 3 to 5, in which said at least one injection and/or extraction site (51, 52, 53) is used to inject an anti-coagulant and/or to extract a sample of blood for analysis and/or to extract the blood contained in said collection vessel (20).

7. A device according to any preceding claim, in which said device includes blood-flow control means (60) and/or suction control means (70).

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- 8. A device according to claim 7, in which said blood-flow control means (60) and/or said suction control means (70) include a knurled adjustment wheel.
- 9. A device according to any preceding claim, in which said collection vessel (20) contains an anti-coagulant before receiving said placental blood.
- 10. A device according to any preceding claim, in which said device is packaged in sterile manner and is assembled in a single package so as to be ready to use once said package has been opened.